

**Introduction of an Emission Trading Scheme (ETS) for reducing pollution emissions, controlling air pollution, and improving air quality in the State of Maharashtra.**

**Government of Maharashtra  
Department of Environment and Climate Change  
Government Resolution No. APC 2023/ C.R. 77/ T.C.2**

New Administration Building, 15th Floor, Hutatma Rajguru Chowk,  
Madame Cama Road, Mantralaya, Mumbai 400032.

Date: 20 September, 2024

**Read:-**

1. Section 17(1) of the Air (Prevention and Control of Pollution) Act, 1981
2. Section 18(1) of the Air (Prevention and Control of Pollution) Act, 1981

**Introduction:-**

Emissions from industry play a major role in polluting the surrounding air and have a detrimental effect on human health and the environment. Therefore, it is important to prevent and control emissions for the sake of the environment and human well-being.

To achieve the dual goals of a clean environment and economic growth, the regulation to reduce emissions should consider the cost of pollution abatement. The majority of industries operating in Maharashtra have already installed air pollution control devices that are in principle capable of meeting pollution norms. Mandating industries to install more complex and expensive abatement equipment to control air pollution may lead to rise in costs without reducing emissions. Therefore, use of market-based tools such as Emission Trading Scheme (ETS), which reduce pollution at a lower cost to industries and provide affordable clean air, is the need of the hour.

Therefore, with the purpose of establishing an Emission Trading Scheme (ETS) in the state, the Government on 13 September, 2024 signed a Memorandum of Understanding (MoU) with the University of Chicago Trust [Energy Policy Institute at the University of Chicago (EPIC India)] and J-Pal South Asia at IFMR, to conduct rigorous scientific research on emission trading schemes. As specified in the agreement, implementation of an Emission Trading Scheme (ETS) on a pilot basis to reduce emissions, was under consideration of the Government. Now accordingly, the Government is taking the following decision:

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It has been decided to implement a pilot project of the Emission Trading Scheme for Sulphur Dioxide (ETS-SO<sub>2</sub>) for select industries in Maharashtra, which are leading Sulphur Dioxide emitters in the state. The scheme will be implemented by the Maharashtra Pollution Control Board. The structure and terms/conditions of the scheme shall be as follows:

**Structure of Emission Trading Scheme:**

Since the trading scheme is a market-based dual-purpose tool, it will provide environmental protection by imposing binding limits on total emissions. It will also give businesses flexibility in emissions reduction measures that will allow them to cut emissions at a lower cost. The structure of the scheme will be as follows:

- i. The ETS-SO<sub>2</sub> (pilot project) will cover select industries in the state. Implementation of the scheme will be done in a phased manner.
- ii. In ETS-SO<sub>2</sub> (pilot project), the traded commodity will be kilogram mass of SO<sub>2</sub> emissions as measured by Continuous Emissions Monitoring Systems (CEMS).
- iii. Permits will be issued by the Maharashtra Pollution Control Board to selected industries. These permits, in zero net supply, would therefore limit the total quantum of SO<sub>2</sub> emission from these industries.
- iv. Permits will be issued using a predetermined allocation rule decided by the regulator. Every permit shall correspond to a fixed quantity of SO<sub>2</sub> emissions. The sum of the allocated and the auctioned permits shall be equal to the total cap.
- v. Industries will use trading platform to trade with one another in order to settle their allotted emission permit balance. The industries emitting lower than the permitted emissions shall have permits to sell, whereas the industries emitting higher than the permitted emissions shall buy the permits from the other units.
- vi. The SO<sub>2</sub> emissions trading market therefore would be similar in nature to trade in commodities. Through the trading scheme, the buyer industry will pay charges for exceeding the permitted emission limit, while the seller industry will be rewarded for having reduced emissions.
- vii. ETS-SO<sub>2</sub> will be divided into "compliance periods" of predetermined length. Industries shall be considered in compliance with the scheme if they hold permits that are equal to or greater than their actual mass of emissions released during the whole of the prior compliance period. For clarification and avoidance of doubt, an industry that for example emitted 35000 kg of Sulphur Dioxide, but held permits for only 30000 kg, at the close of a compliance period, would be out of compliance.

**Emission Trading Scheme Market Oversight Committee:**

A Market Oversight Committee will be set up to provide expert input and feedback throughout the execution period of ETS-SO<sub>2</sub> (pilot project) to ensure ease of implementation of the scheme. The Market Oversight Committee will meet once every month until the market is launched and thereafter once every three months during the ETS-SO<sub>2</sub> project validity period. The Market Oversight Committee shall consist of the following members:

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<b>A.K.</b>	<b>Committee members</b>	<b>Positions</b>
1	Member Secretary, Maharashtra Pollution Control Board.	Chairman
2	Deputy Secretary (TC-2), Department of Environment and Climate Change, Mantralaya, Mumbai.	Member
3	Concerned Regional Officer, Maharashtra Pollution Control Board	Member
4	Chairman of Epic Asia	Member
5	Representative Researcher from EPIC India	Member
6	Representative Researcher from J-PAL South Asia	Member
7	Representative of NEML (NCDEX E-Markets Limited)	Member
8	Mr. Sanjeev Kanchan.	Member
9	Representatives of related industries	Member
10	Joint Director (APC) Maharashtra Pollution Control Board	Member Secretary

**Validity of the Sulfur Dioxide Emission Trading Scheme (ETS-SO<sub>2</sub>) pilot project:-**

The validity of the project shall be three years from the date of issuance of this Government decision. The success of the project will be reviewed after eighteen (18) months and a decision regarding the extension of ETS and pilot project will be taken by the Market Oversight Committee with the approval of competent authority.

**Terms and Conditions of the Emissions Trading Scheme (ETS-SO<sub>2</sub>):**

- i. The implementation of the ETS scheme shall in no way change or remove existing legal and regulatory requirements for industries to meet the prescribed concentration standards for sulphur dioxide emissions.
- ii. A certain number of tradeable permits will be issued by the Maharashtra Pollution Control Board to concerned selected industries during each compliance period.
- iii. Emissions during the compliance period shall be determined by CEMS data.
- iv. In case of any missing or invalid CEMS data at the industry end, the industry will be assumed to have emitted at an increased rate during the period of missing or invalid data.
- v. If an industry knowingly reports any inaccurate data, penal action will be taken against such industries and it will be deemed non-compliant with the scheme.

**Penalties for non-compliance with the Emissions Trading Scheme (ETS-SO<sub>2</sub>):**

Industries participating in the scheme are expected to trade for sufficient number of permits to meet their compliance obligations. The following penal action will be taken against industries that do not comply with the rules:

- a. Industries are required to submit a "trading deposit" at the time of enrolment in the ETS. If it is found that a participating industry has not complied with the rules at the end of the compliance period, a portion of trading deposit submitted by the industry shall be deducted in proportion to the extent of non-compliance. Quantum

of deduction shall be fixed on the basis of the recommendation by the Market Oversight Committee.

- b. Failure to comply properly with the rules will result in financial penal action, proportionate to the extent of non-compliance, as specified in the scheme. Failure to pay financial penalty will result in further action as per the provisions of the Air (Prevention and Control of Pollution) Act, 1981.

**The responsibilities and duties of various stakeholders of the Emission Trading Scheme (ETS-SO2):**

The responsibilities and duties of various stakeholders involved in the implementation of the ETS-SO2 pilot project in Maharashtra will be as follows:

**(a) Epic India at University of Chicago Trust and J - Pal South Asia at IFMR.**

- i. These organizations will serve as design consultants and evaluation partners for the market.
- ii. These organizations will be responsible for developing a handbook outlining the detailed modalities of emission trading, roles of stakeholders, allocation of permits, trading deposit, fungibility period, compliance period, true-up period, etc.

**(b) Market Oversight Committee –**

- i. To ensure ease of implementation of the scheme.
- ii. To provide necessary expert advice and feedback during the execution period of ETS-SO2.
- iii. To determine the appropriate parameters of market design in consultation with the Maharashtra Pollution Control Board. [E.g. Level of cap, SO2 emission from each of the point sources, amount of trading deposits, amount to be deducted from trading deposits in case of excess SO2 emission or unavailability of data, etc.]
- iv. To assign a fixed quantity of SO2 emission for each permit in consultation with the Maharashtra Pollution Control Board.
- v. To determine the duration of compliance period in consultation with the Maharashtra Pollution Control Board.
- vi. To ensure proper implementation of all the terms and conditions imposed for industries, alongside the Maharashtra Pollution Control Board.
- vii. To set the rules regarding submission of incorrect or illegal CEMS information by industry. To get these rules approved by the concerned competent authority / Maharashtra Pollution Control Board.
- viii. To take a decision on any information related issue beyond the control of the industry, and to take the approval of the competent Authority / Maharashtra Pollution Control Board for said decision.
- ix. To determine the amount to be paid by the industry as a "trading deposit" when registering with ETS, and to determine the portion of the trading deposit to be deducted in proportion to the extent of non-compliance if a participating industry does not comply with the rules at the end of the compliance period.

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- x. To grant extension to the ETS pilot project in consultation with and approval from the competent authority.

**(c) Maharashtra Pollution Control Board –**

- i. To notify the industries selected about their participation in the ETS pilot project.
- ii. To determine the appropriate parameters of market design in consultation with the Market Oversight Committee. [E.g. Level of cap, SO2 emission from each of the point sources, amount of trading deposits, amount to be deducted from trading deposits in case of excess SO2 emission or unavailability of data, etc.]
- iii. To assign a fixed quantity of SO2 emission for each permit in consultation with the Market Oversight Committee.
- iv. Issuance of a certain number of tradeable permits to selected industries during each compliance period.
- v. To declare findings by comparing total pollution released by each industry and their permit holding capacity at the end of each compliance period, in consultation with the Market Oversight Committee.
- vi. To authorize a Market operator to run the platform for SO2 emission trading. This trading platform would facilitate registration, trading, auctioning, maintenance and information sharing, etc. providing both back-end functionality and the industry-facing front end.
- vii. Ensure proper implementation of all terms and conditions applicable to industries along with the Market Oversight Committee.

The decision of the Chairman of the Market Oversight Committee is final and binding.

This government decision has been made available on government of Maharashtra's website [www.maharashtra.gov.in](http://www.maharashtra.gov.in) and its identifying number is 202409231657152204. This government resolution is being signed digitally.

By order and in the name of the Governor of Maharashtra.

**( V. S. Patil )**  
**Section Officer,**  
**Government of Maharashtra**

**Copy to:-**

1. The Private Secretary to Hon'ble Chief Minister, Govt of Maharashtra, Mantralaya, Mumbai-32
2. The Private Secretary to Hon'ble Deputy Chief Minister, Govt of Maharashtra, Mantralaya, Mumbai-32
3. The Private Secretary to Hon'ble Deputy Chief Minister, Govt of Maharashtra, Mantralaya, Mumbai-324.
4. All members of the Market Oversight Committee

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5. Member Secretary, Maharashtra Pollution Control Board, Mumbai.
6. Chairman of Epic Asia, New Delhi.
7. Representative Researcher from EPIC India, New Delhi.
8. Representative Researcher from J-PAL South Asia, New Delhi.
9. Representative of NEML (NCDEX E-Marktes Limited), Mumbai.
10. Mr. Sanjeev Kanchan, New Delhi.
11. Select file.